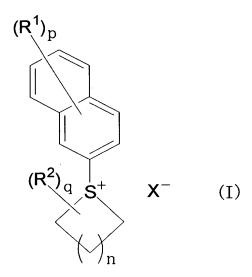
## **CLAIMS**

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1. A sulfonium salt compound shown by the following formula (1),



wherein R<sup>1</sup> represents a linear or branched alkyl group having 1-14 carbon atoms, a monovalent hydrocarbon group having an alicyclic skeleton and containing 3-14 carbon atoms, a linear or branched alkoxyl group having 1-14 carbon atoms, a group represented by –OR<sup>3</sup> (wherein R<sup>3</sup> is a monovalent hydrocarbon group having an alicyclic skeleton and containing 3-14 carbon atoms), a linear or branched alkyl sulfanyl group having 1-14 carbon atoms, an organic sulfanyl group having an alicyclic skeleton and containing 3-14 carbon atoms, a linear or branched alkane sulfonyl group having 1-14 carbon atoms, or an organic sulfonyl group having an alicyclic skeleton and containing 3-14 carbon atoms, two or more R<sup>1</sup> being either the same or different, R<sup>2</sup> represents a substituted or unsubstituted, linear, branched, or cyclic alkyl group having 1-14 carbon atoms, or two or more R<sup>2</sup> groups bond to form a monocyclic structure having 3-14 carbon atoms or a polycyclic structure having 6-14 carbon atoms, two or more R<sup>2</sup> groups being either the same or different, p is an integer of 0-7, q is an integer of 0-6, n is an integer of 0-3, and X<sup>-</sup> represents a sulfonic acid anion.

2. The sulfonium-salt compound according to claim 1, wherein the group X in the formula (1) is a sulfonic-acid anion of the following formula (II),

$$R^4$$
— $CF_2CF_2SO_3$  (II)

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wherein R<sup>4</sup> represents a substituted or unsubstituted, linear or branched alkyl group having 1-14 carbon atoms or a substituted or unsubstituted, monovalent hydrocarbon group having an alicyclic ring and containing 3-14 carbon atoms.

- 3. The sulfonium-salt compound according to claim 1 or claim 2, wherein p is 0 or 1, q is 0, and n is 2 in the formula (I).
- 4. The sulfonium-salt compound according to claim 1 or claim 2, wherein p is
  1, q is 0, n is 2, and R<sup>1</sup> is a linear or branched alkoxyl group having 1-14 carbon atoms
  in the formula (I).
  - 5. The sulfonium-salt compound according to claim 1 or claim 2, wherein p is 1, q is 0, n is 2, and R<sup>1</sup> represents -OR<sup>3</sup> (wherein R<sup>3</sup> is a monovalent hydrocarbon group having an alicyclic skeleton and containing 3-14 carbon atoms) in the formula (I).
  - 6. The sulfonium-salt compound according to claim 1 or claim 2, having a molar extinction coefficient at a wavelength of 193 nm of 10,650 I/mol·cm or less.
- 7. A photoacid generator comprising the sulfonium salt compound according25 to claim 1.
  - 8. A positive-tone radiation-sensitive resin composition comprising (A) a

photoacid generator comprising the photoacid generator according to claim 7 and (B) an acid-dissociable group-containing resin which is insoluble or scarcely soluble in alkali and becomes alkali soluble when the acid-dissociable group dissociates.

9. The positive-tone radiation-sensitive resin composition according to claim 8,
5 wherein the resin of the component (B) has a recurring unit of the following formula
(10),

$$\begin{array}{c}
R^{11} \\
-(-C - CH_2 - ) - \\
O = C \\
O \\
R^{12} - C - R^{12} \\
R^{12}
\end{array}$$
(10)

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wherein R<sup>11</sup> represents a hydrogen atom or methyl group and R<sup>12</sup> individually represents a linear or branched alkyl group having 1-4 carbon atoms or a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, or any two of R<sup>12</sup> groups form, in combination and together with the carbon atom with which these groups bond, a substituted or unsubstituted, bridged or unbridged, divalent alicyclic hydrocarbon group having 3-20 carbon atoms, with the remaining R<sup>12</sup> group being a linear or branched alkyl group having 1-4 carbon atoms or a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms.

10. The positive-tone radiation-sensitive resin composition according to claim 8, wherein the amount of the acid-dissociable groups introduced into the resin (B) is 5-100%.

11. The positive-tone radiation-sensitive resin composition according to claim 9, wherein any two of the  $R^{12}$  groups, in the recurring unit of the formula (10) in the

resin (B), form, in combination and together with the carbon atom with which these groups bond, a substituted or unsubstituted, bridged or unbridged, divalent alicyclic hydrocarbon group having 3-20 carbon atoms, with the remaining R<sup>12</sup> group being a linear or branched alkyl group having 1-4 carbon atoms.

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- 12. The positive-tone radiation-sensitive resin composition according to claim 9, wherein any two of the R<sup>12</sup> groups, in the recurring unit of the formula (10) in the resin (B), form, in combination and together with the carbon atom with which these groups bond, a substituted or unsubstituted, bridged or unbridged, divalent alicyclic hydrocarbon group having 3-20 carbon atoms and the remaining R<sup>12</sup> group is a linear alkyl group having 1-4 carbon atoms.
- 13. The positive-tone radiation-sensitive resin composition according to claim 8, wherein the resin of the component (B) has a polystyrene-reduced weight molecular weight determined by gel permeation chromatography of 1,000 to 500,000.
- 14. The positive-tone radiation-sensitive resin composition according to claim 8, wherein the resin of the component (B) has a ratio (Mw/Mn) of the polystyrene-reduced weight molecular weight (Mw) to the polystyrene-reduced number average molecular weight (Mn) determined by gel permeation chromatography (GPC) of the resin (B) of 1-5.
- 15. The positive-tone radiation-sensitive resin composition according to claim 8, wherein the content of the component (A) is 0.001-70 parts by weight for 100 parts by weight of the component (B).